MIL-120A
Thin•Twist
COAX to 10BASE-T
Media Converter

THIN•TWIST

Model MIL•120A

COAX to 10BaseT
CONVERTER

12-20VAC

COL/TP
RCV/TP
LINK
POWER
RCV/CX
COL/CX

Ethernet / IEEE 802.3
FCC PART 15 CLASS A COMPLIANT
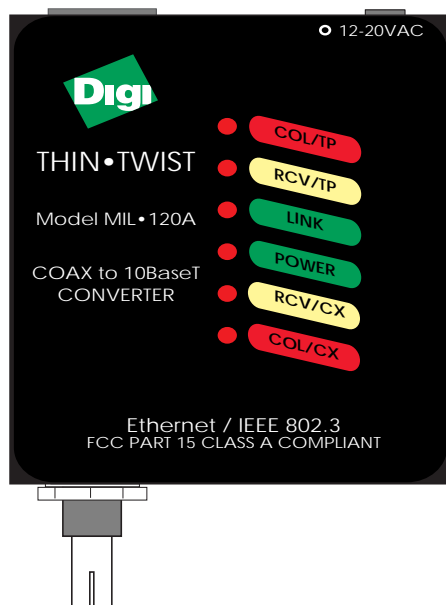
Installation Guide

This guide includes the following information:

Installation

Do the following to install the MIL-120A:

1. Attach a UTP cable from the network to the MIL-120A's RJ-45 port

2. Attach a T-type BNC connector from the network cabling to the BNC connector

3. Connect the power adapter's cord from the power source to the unit

*Note:* Use shielded twisted pair (CAT 5) cabling for CISPR 22 B installation.

Link Test

The MIL-120A provides a *Link* test function, which is a 10BASE-T standard. The MIL-120A ships with the *Link* function test "enabled"—only pin one jumpered with a jumper block. This allows the LEDs to illuminate when there are links.

Disabling Link

To disable the *Link* test:

1. Use a Phillips-head screwdriver to remove the four Phillips-type screws located on the sides of the unit

2. Remove the BNC nut and its washer

3. Slide the housing off, over the BNC connector

4. Locate the two-pin *Link* jumper (Figure 1)

5. Place the jumper block onto both pins

6. Reassemble the unit (reverse steps 1 through 3)

Note: The MIL-120A operates in a "StarLAN-10" environment when *Link* is disabled. Only the **Power** and **Link** LEDs Illuminate.
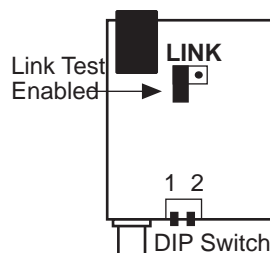
Figure 1. Link and DIP Switch Locations

Diagnostic LEDs

COL/TP: Collisions are occurring on the 10BASE-T network

RCV/TP Unit is receiving packets from the 10BASE-T network

Link: There is an active connection to a10BASE-T hub (or another node) when *Link* is enabled

Power: Unit is receiving power

RCV/CX Unit is receiving packets from the 10BASE2 network

COL/CX: Collisions are occurring on the 10BASE2 network

Configuration

Next to the COAX cable connector, there is a DIP switch that control the 50 ohm termination resistor (Figure 1). These switches support a variety of configurations. Both switches are shipped in the UP position (default). Other configurations include:

If the MIL-120A is connected to the end of a multi-node segment without a T-connector and terminator, enable the 50 ohm resistor by:

• Placing switch 1: UP and

• Placing switch 2: DOWN

If the MIL-120A is connected to a single-node "without" a T-type connector and terminator on a COAX cable of less than one meter's length:

• Place both switches (1 and 2) in the DOWN position

Note: For this configuration, you do not need a 50 ohm terminator on the COAX segment of the MIL-120A's BNC connector.

RJ-45 Pinouts
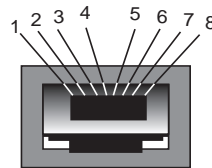
MDI
Pin 1=TX+
Pin 2=TX-
Pin 3=RX+
Pin 6=RX-

Figure 2. RJ-45 Pinouts

Follow these guidelines when connecting the 10BASE-T Port:

• For a Hub or a Repeater, use a straight-through cable (where the pins are connected 1 to 1, 2 to 2, 3 to 3, and 6 to 6)

• For a Workstation/PC port, use a swap cable (where the pins are connected 1 to 3, 2 to 6, 3 to 1, 6 to 2)

Legal

Regulatory Approvals

- FCC Class A
- UL 1950
- CSA 22 No. 950
- EN60950
- CE
  – EN55022 Class B
  – EN50082-1

Canadian EMI Notice

This Class A digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- EN55022 (CISPR 22) - Radio Frequency Interference
- EN50082-1 (IEC801-2, IEC801-3, IEC801-4) - Electromagnetic Immunity
- EN60950 (IEC950) - Product Safety

Five-Year Limited Warranty

Digi International warrants to the original consumer or purchaser that each of its products, and all components thereof, will be free from defects in material and/or workmanship for a period of five years from the original factory shipment date. Any warranty hereunder is extended to the original consumer or purchaser and is not assignable.

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To Contact Digi

For prompt response when calling for service information, have the following information ready:

- Product serial number and rev.
- Date of purchase
- Vendor or place of purchase

Reach Digi Technical Support at 408/744-2751
Or E-mail at "sun-tech@dgii.com"

Address: 1299 Orleans Drive
          Sunnyvale, CA 94089
Voice: 408/744-2775
Fax: 408/744-2793
E-mail: info@dgii.com